Common elements of immediate self-harm and suicide crisis interventions for adults by Mental Health Services

Citation

Emma-Lily Proctor, Catherine O'Neill, Jill Barker, Judith Eberhardt. Common elements of immediate self-harm and suicide crisis interventions for adults by Mental Health Services. PROSPERO 2024 CRD42024528323 Available from: https://www.crd.york.ac.uk/prospero/display_record.php?ID=CRD42024528323

Review question

What are the common elements of immediate self-harm and suicide interventions for people in crisis provided by Mental Health Services within the UK?

Searches

The following databases will be searched: EBSCO: DATABASES - APA PsycINFO, AMED - The Allied and Complementary Medicine Database, MEDLINE, APA PsycArticles, Psychology and Behavioral Sciences Collection, CINAHL Complete, Google Scholar (first 100 documents).

The search will be limited to papers written in English and research conducted within the UK. Additional searches will be performed for relevant grey literature using Google Scholar / websites from organisations that may produce policy papers in this area. (First 100 documents)

Types of study to be included

Full-text peer-reviewed journal articles published and unpublished documents created between 2011-2024. The NHS made significant changes to mental health crisis services in 2016 by introducing specialist psychiatric liaison teams into emergency departments across the country. They also invested £70 million introducing mental health professionals in ambulance control rooms. In 2018 the independent review of the mental health act took place, creating the NHS mental health implementation plan 2019/20. NICE also introduced guidelines on what should happen in a crisis in 2011, including the length of time patients are likely to wait to be seen and the treatments on offer. This timeframe also includes progress made since the suicide prevention strategy published in 2012 and has the potential to identify changes that have been introduced to action the latest 2023 version of the suicide prevention strategy alongside several guidelines published alongside. Therefore 2011 is a suitable year to commence searches.

Condition or domain being studied

The condition or domain being studied includes the common elements of immediate crisis interventions involving self-harm and suicide interventions provided by mental health services. This review will provide a clear definition of crisis including self-harm and suicide based on information found from literature, NICE and other medical documentation. All interventions provided by first responders will be examined to extract and review the different elements used.

Any long-term interventions will be excluded as this review will focus on short-term crisis intervention.

Participants/population

Inclusion criteria:

Adults (18+)

Participants Must be experiencing crisis involving self-harm and/or suicide

Papers that do not state the length of intervention within the title or abstract will be taken to the full text screening stage.

Exclusion criteria:

Studies involving participants under 18 years of age

Studies involving participants who receive support from family, friends, or other forms of informal support

Studies reporting experiences of family/friends of individuals who receive such care

Intervention(s), exposure(s)

The review will explore a variety of different interventions provided by mental health teams during crises involving self-harm and suicide, highlighting the effectiveness of the different common elements which will be distinguish between, Practice elements, Process elements, or Implementation elements.

Inclusion criteria:

Papers describing interventions provided by mental health services during a crisis for anyone above the age of 18. Interventions must be specific to self-harm and suicide.

Manuals for the interventions must be readily available for use.

Exclusion criteria:

Any studies that examine crisis support provided by family/friends, services other than NHS mental health services (eg. Charity organisations such as MIND and Samaritans), or self-management, will be excluded. Papers reporting crisis interventions lasting more than 72 hours will also be excluded (long-term hospital treatment, rehabilitation, or forensic settings as crisis support usually lasts for three days before moving the support over to other services where appropriate).

Comparator(s)/control

Not applicable as the focus will be on the intervention elements.

Context

Studies examining interventions within all settings including community mental health team, hospital emergency department, individuals home (face-to-face and telephone contact) and crisis assessment suites.

Main outcome(s)

The primary outcomes are to identify which elements of interventions are most successful and have a positive outcome during a self-harm and suicide crisis situation. These interventions can be provided as part of clinical and non-clinical services.

Measures of effect

The measures of effect will be determined through synthesis by analysing the extent of improvements during crisis situations. This is likely to be reported as pre-post differences, measures during care or after treatment has ended.

Additional outcome(s)

Not applicable

Measures of effect

Data extraction (selection and coding)

Each study will be classified as either positively effective, ineffective, or negatively effective for each outcome provided. Interventions from randomised controlled trials will be classified as effective if at least one effect measure on a primary or secondary outcome was statistically significant (p<.05). For non-randomised controlled trials and longitudinal studies, interventions will be classed as effective if there was at least one statistically significant difference between the intervention group and the comparison group on a primary or secondary outcome, while pre-post changes were significant on the same outcome. Interventions that are not classifiable as effective will be classified as ineffective. It may be found that some studies have a mixture of effective and ineffective outcomes.

Intervention manuals will be used to inform data extraction for each included study. The data to be extracted includes:

- Methods (study design, timing of outcome measures, whether intention-to-treat analyses were used

- Information about participants (age, gender, type of risk, number of participants, attrition, reach)

- Details on interventions and control conditions

- Outcome measures

Common elements analyses will be conducted, and the coding procedure will allow for three different outcomes to be coded. The three most frequently significant (both effective and ineffective) will be chosen for full analysis

Risk of bias (quality) assessment

Using the criteria outlined in the Cochrane Handbook for systematic reviews (Cochrane collaboration, 2011) on interventions, two review authors will independently assess risk of bias in each study meeting the eligibility criteria. Each study will be rated high, low, or unclear risk of bias. Disagreements will be resolved through discussion and only studies rated low or unclear risk across the domains will be included in the common elements analysis. This is to ensure the risk of bias is kept to a minimum.

Strategy for data synthesis

When coding elements distillation and matching procedures combining data-mining techniques, frequency count and interaction-detection algorithms will be considered (Engell et al., 2023). This is performed using an iterative open ended coding process using intervention manuals as a basis to review common elements. Once this stage is completed a coding protocol will be developed, following which common elements will coded for categories: format, defined as treatment delivery structure elements; process, defined as elements reflecting the approach used to deliver content elements; and content, defined as the specific skills and content areas targeted in the interventions. This will continue to be updated throughout the data collection period should new treatment elements emerge. The coding protocol will be reviewed by a second and third reviewer to establish coding reliability. All codes will be checked by two independent coders and any discrepancies will be resolved with a third researcher where required. The elements will then be coded as ‘present’ (1), meaning the element is specifically described in the intervention manual/supporting materials; or ‘absent’ (0), not explicitly described in the manual/materials (Meza et al., 2023).This model was designed to provide a detailed description of strategies characterising evidence-based treatments and to circumvent some of the problems associated with using manuals as the level of analysis (empirical redundancy or the inability to aggregate similar findings across literature) as well as those associated with rationally defined treatment approaches (investigator-driven inferences about the boundaries of a treatment approach, a problem type, or some other context variable). This method uses frequency patterns in practice techniques to guide empirical construction of the organisation of the selected literature according to any number of a priori selected variable of interest. The model is broadly designed to (a) empirically accumulate a map of the treatment practices with favourable treatment outcome data, (b) promote understanding of the underlying data relations between treatment practices and client or context variables, and (c) facilitate hypothesis generation regarding

potential prescriptive heuristics to apply to novel situations. (Chorpita & Daleiden, 2009)

The review will distinguish between:

- Practice elements

- Process elements

- Implementation elements

Analysis of subgroups or subsets

Coding will take place using Microsoft Excel.The elements available for coding will be prepared, using consensus mapping with coders and including elements that are anticipated to be included in studies. During coding, identified new unanticipated elements will be listed. This procedure will be used to reduce confirmatory bias and facilitate the discovery of novel elements.

These will then be reviewed by an independent researcher, following which, conflicts will be resolved by discussion or a third researcher.

All elements will be given a frequency count corresponding with the number of times they were included in studies to determine the most common elements.If elements were located in ineffective interventions, these will be included, making a note on which were effective and ineffective to allow for comparisons. This will in turn create subcategories during the process.

Once completed the coded data will be used to create the results in which the most common elements, both effective and ineffective, will be discussed. This will be guided by the CASP checklist for systematic reviews (CASP Systematic review checklist, 2018).

Contact details for further information

Emma-Lily Proctor

e.proctor@tees.ac.uk

Organisational affiliation of the review

Teesside University

Review team members and their organisational affiliations

Miss Emma-Lily Proctor. Teesside University

Dr Catherine O'Neill. Teesside University

Dr Jill Barker. Teesside University

Assistant/Associate Professor Judith Eberhardt. Teesside University

Type and method of review

Intervention, Systematic review

Anticipated or actual start date

01 April 2024

Anticipated completion date

31 October 2024

Funding sources/sponsors

Not applicable

Conflicts of interest

None known

Language

English

Country

England

Stage of review

Review Ongoing

Subject index terms status

Subject indexing assigned by CRD

Subject index terms

MeSH headings have not been applied to this record

Date of registration in PROSPERO

04 April 2024

Date of first submission

04 April 2024

Stage of review at time of this submission

The review has not started

Stage	Started	Completed
Preliminary searches	No	No
Piloting of the study selection process	No	No
Formal screening of search results against eligibility criteria	No	No
Data extraction	No	No
Risk of bias (quality) assessment	No	No
Data analysis	No	No

The record owner confirms that the information they have supplied for this submission is accurate and complete and they understand that deliberate provision of inaccurate information or omission of data may be construed as scientific misconduct.

The record owner confirms that they will update the status of the review when it is completed and will add publication details in due course.

Versions

04 April 2024